

WHAT IS CLAIMED:

- 1 1. An implant adapted to be placed between spinous
2 processes comprising:
3 a spacer that is adapted to fit between spinous processes;
4 and
5 a means for adjusting the height of the spacer in order to
6 adjust the spacing between the spinous processes.
- 1 2. The implant of claim 1 wherein the spacer has an elliptical
2 shape in at least one dimension wherein a height of the spacer in that
3 dimension is less than a length of the spacer in another dimension.
- 1 3. The implant of claim 1 wherein the spacer has a first
2 portion and a second portion which are movable relative to each other.
- 1 4. The implant of claim 1 wherein the adjusting means
2 includes a first portion and a second portion of the spacer connected by
3 a hinge.
- 1 5. The implant of claim 1 wherein the adjusting means
2 includes the spacer of the implant further comprises a slotted sphere.
- 1 6. The implant of claim 5 wherein the slotted sphere engages
2 the first and second portion of the spacer to maintain the profile height.
- 1 7. The implant of claim 5 wherein the slotted sphere engages
2 a screw extending from between first and second portion of the spacer
3 to maintain the profile height.
- 1 8. The implant of claim 3 wherein the first portion and the
2 second portion each have a curved surface on a first side and a height
3 adjuster contacting surface on a second side opposite the first side.

1 9. The implant of claim 1 wherein the adjusting means of the
2 implant further comprises a jack.

1 10. The implant of claim 9 where the said jack is adjustable to
2 a greater profile and a lesser profile by turning a screw in one of a first
3 direction and a second direction.

1 11. An implant adapted to be placed between spinous
2 processes comprising:

3 a body having a shaft extending therefrom;
4 a spacer pivotally mounted on the body, the spacer
5 including a first portion and a second portion; and
6 a mechanism positioned between the first portion and the
7 second portion that can adjust a space between the first and
8 second portion.

1 12. The implant of claim 11 wherein the spacer has an elliptical
2 shape.

1 13. The implant of claim 11 wherein the first portion and the
2 second portion of the spacer are connected proximal to an end thereof
3 by a hinge.

1 14. The implant of claim 11 wherein the mechanism of the
2 implant further comprises a slotted sphere.

1 15. The implant of claim 14 wherein the slotted sphere
2 engages the first and second portion of the spacer to maintain the profile
3 height.

1 16. The implant of claim 14 wherein the slotted sphere
2 engages a screw extending from the hinge between the first and second
3 portion of the spacer to maintain the profile height.

1 17. The implant of claim 11 wherein the first portion and the
2 second portion each have a curved surface on a first side and a height
3 adjuster surface on a second side opposite the first side.

1 18. The implant of claim 11 wherein the mechanism of the
2 implant further comprises a jack.

1 19. The implant of claim 18 wherein the jack engages the first
2 and second portion of the spacer to maintain the profile height.

1 20. The implant of claim 18 wherein the jack is adjustable to a
2 greater profile and a lesser profile by turning a screw in one of a first
3 direction and a second direction.

1 21. An implant adapted to be placed between spinous
2 processes comprising:

3 a body having a shaft extending therefrom;
4 a first wing extending from the shaft and adapted to be
5 placed adjacent a first and a second spinous process;
6 a tissue expander extending from the distal end of the
7 shaft;
8 a spacer that is rotatably mounted to the shaft, the spacer
9 having a first portion and a second portion; and
10 a mechanism that is mounted to the spacer and that can
11 adjust the spacing between the first and second portions of the
12 spacer.

1 22. The implant of claim 21 wherein the spacer is elliptical in
2 shape with the first portion and the second portion divided about a major
3 axis of the elliptical shaped spacer.

1 23. The implant of claim 21 wherein the first portion and the
2 second portion of the spacer are connected by a hinge.

1 24. The implant of claim 21 wherein the mechanism of the
2 implant further comprises a slotted sphere.

1 25. The implant of claim 24 wherein the slotted sphere
2 engages the first and second portion of the spacer to maintain the profile
3 height.

1 26. The implant of claim 24 wherein the slotted sphere
2 engages a screw extending from between the first and second portion of
3 the spacer to maintain the profile height.

1 27. The implant of claim 21 wherein the mechanism of the
2 implant further comprises a jack.

1 28. The implant of claim 27 wherein the jack engages the first
2 and second portion of the spacer to maintain the profile height.

1 29. The implant of claim 27 where the said jack is adjustable to
2 a greater profile and a lesser profile by turning a screw in one of a first
3 direction and a second direction.

1 30. An implant adapted to be placed between spinous
2 processes comprising:
3 a body having a shaft extending therefrom; and
4 a spacer that is rotatably mounted on the shaft,
5 wherein the spacer has an adjustable profile.

1 31. The implant of claim 30 wherein the spacer has an elliptical
2 shape.

1 32. The implant of claim 30 wherein the spacer has a first
2 portion and a second portion.

1 33. The implant of claim 32 wherein the first portion and the
2 second portion of the spacer are connected by a hinge.

1 34. The implant of claim 30 wherein the spacer of the implant
2 further comprises a slotted sphere.

1 35. The implant of claim 34 wherein the slotted sphere
2 engages the first and second portion of the spacer to maintain the profile
3 height.

1 36. The implant of claim 34 wherein the slotted sphere
2 engages a screw to maintain the profile height.

1 37. The implant of claim 32 wherein the first portion and the
2 second portion each have a curved surface on a first side and a height
3 adjuster contacting surface on a second side opposite the first side.

1 38. The implant of claim 30 wherein the spacer of the implant
2 further includes a jack.

1 39. An implant adapted to be placed between spinous
2 processes comprising:

3 a body having a shaft extending therefrom; and
4 a spacer that is rotatably mounted on the shaft;
5 wherein the spacer has a hinged body having a first portion
6 and a second portion; and
7 a device to adjust a space between the first portion and the
8 second portion.

1 40. The implant of claim 39 wherein the device of the implant
2 further comprises a slotted sphere.

1 41. The implant of claim 40 wherein the slotted sphere
2 engages the first and second portion of the spacer to maintain the profile
3 height.

1 42. The implant of claim 39 wherein the device of the implant
2 further comprises a jack.

1 43. A method of implanting a device between an upper and
2 lower spinous process in a spine, the method comprising:

- 3 a. exposing an affected region of the spine posteriorly;
- 4 b. inserting an implant between the spinous
- 5 processes;
- 6 c. adjusting the profile of the implant; and
- 7 d. closing the wound.

1 44. A method of adjusting an interspinous implant, the method
2 comprising:

- 3 a. accessing the implant with a cannula; and
- 4 b. adjusting a profile of the implant with a tool
- 5 accessed through the cannula.

1 45. A method of adjusting an implanted interspinous implant
2 having a body having a shaft extending therefrom, a spacer pivotally
3 mounted on the body, and a screw for adjusting the space between a
4 first portion and a second portion of the spacer, the method comprising:

- 5 a. accessing the screw of the implanted interspinous
- 6 implant through an incision with a cannula; and
- 7 b. adjusting a profile of the implant with a tool
- 8 accessed through the cannula by turning the screw of the implant
- 9 in one of a first direction or a second direction.